

rubbing a layer with a support impregnated with an abrasive liquid composition, wherein

said layer is (1) a material selected from the group consisting of silicon oxide, silicon nitride, and a polymer having a low dielectric constant, or (2) one layer of silicon oxide and another layer of silicon nitride, and

said abrasive liquid composition comprises an aqueous acid suspension of

(i) individualized colloidal silica particles not linked to each other by siloxane bonds,

together with (ii) a surfactant, and

wherein said abrasive liquid composition is at a pH of 1-5.

20. (amended) The process of claim 19, wherein said rubbing is carried out with said individualized colloidal silica particles which have diameters between 12 nm and 100 nm.

21. (amended) The process of claim 18, wherein said rubbing is carried out with said individualized colloidal silica particles which have diameters between 12 nm and 100 nm.

22. (amended) The process of claim 17, wherein said rubbing is carried out with said individualized colloidal

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silica particles which have diameters between 12 nm and 100 nm.

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[Add the following new claims:]

37. (new) A process for mechanical chemical polishing in the integrated circuits industry, comprising rubbing a layer with a support impregnated with an abrasive liquid composition, wherein

said layer is (1) a material selected from the group consisting of silicon oxide, silicon nitride, and a polymer having a low dielectric constant, or (2) one layer of silicon oxide and another layer of silicon nitride, and

said abrasive liquid composition consists essentially of an aqueous acid suspension of

(i) individualized colloidal silica particles not linked to each other by siloxane bonds,

together with (ii) a surfactant, and

wherein said abrasive liquid composition is at a pH of 1-5.

38. (new) The process of claim 37, wherein said surfactant is an anionic or non-ionic surfactant.

39. (new) The process of claim 37, wherein the pH is between 2 and 3.